"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

28381 S/124/61/000/008/032/042
A001/A101

Conditions for stable burning ...

at room temperature, for a gasoline drop of 1.8 mm in diameter, ignited in an air flow directed vertically upwards, the critical velocity is equal to 0.4 m/sec; in a horizontal flow, it is 0.5 m/sec, and in a vertical downward flow, it is 0.8 m/sec. In the latter case, separation of flow is preceded by flame in the form of a flat horizonatal disk. The observed discrepancies in the values of critical velocities obtained on different installations the authors explain by differences in conditions of experiments. Temperature pulsations slightly affect evaporation rate of stably burning or stably evaporating drop, as preliminary experiments, which are not described in the report, have shown. However stability conditions depend markedly on the frequency of temperature pulsations. There are 7 references.

V. Aleksandrov

[Abstracter's note: Complete translation]

Card 4/4

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

25739
S/123/61/000/012/032/042
A004/A101

11.7350

AUTHORS: Agafonova, F. A.; Gurevich, M. A.; Tarasova, Ye. F.

TITLE: The conditions of steady combustion of single drops of liquid fuel

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 12, 1961, 21, abstract 12I176 (V sb. "3-ye Vses. soveshchaniye po teorii goreniya v. 2". Moscow, 1960, 29-39)

TEXT: The authors carried out an approximated calculation of the conditions of ignition, extinction and complete combustion taking into account the finite rate of chemical reaction. The equation systems of heat and mass transfer were written down. It was assumed that the combustion process develops within a spherical layer (reduced film) whose outer radius is presented in the form of a function of the Nu-criterion and the drop radius. Combustion and transfer processes are considered as quasi-stationary, and the physical constants as independent of the temperature and the local misture composition. Boundary conditions were used on the drop surface and on the outer boundary of the reduced film. The evaporation rate of the drops was sought for. Solutions were obtained for the evaporation rate and the temperature field in the extreme cases: evaporation

Card 1/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

The conditions of steady combustion ...

without combustion and diffusion combustion. Moreover, solutions were obtained by the numerical method on a computer. It was found that at certain combinations of parameters entering the equations, 3 solutions are possible. If all the solutions are possible, the drop does not ignite, but being lit, burns steadily. In other cases only one solution is possible - either self-ignition or evaporation (the ignited drop is extinguished). The authors investigated a condition for the existence of the equation solution under which combustion is steady. The evaporation rate of the hot drop depends to a small extent on the rate of chemical reaction, while the maximum temperature essentially differs from the temperature in the diffusion combustion zone. Moreover, a considerable part of the vapors moves beyond the boundaries of the reduced film without being burnt. Tests were carried out to measure the completeness of combustion of fine falling gasoline drops and larger drops on a quartz suspender. It was found that a remarkably incomplete combustion process takes place even if the drop is fully seized by the flame. The incompleteness of combustion rapidly grows when the flame extinction conditions are approached, e. g. for drops of an initial diameter of 1.8 mm at a flow velocity of 0.25 m/sec the incompleteness of combustion amounts to 7%, while at a velocity of 0.34 m/sec it is some 30%. Tests to determine the flame blow-off velocity showed that this velocity grows with an increase in temperature, oxygen content

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

25739
S/123/61/000/018/032/042
A004/A101

The conditions of steady combustion ...

in the flow and initial drop size, and depends on the blowing direction. For gasoline drops 1.8 mm in diameter in the air at room temperature this velocity was: with vertical upward blowing - 0.4 m/sec; with horizontal blowing - 0.5 m/sec, and with vertical downward blowing - 0.8 m/sec. Moreover, tests were carried out to study the effect of temperature pulsations on the evaporation rate of burning and non-burning drops, proving the insignificant effect of this factor. There are 4 figures and 7 references.

Sh. M. S.

[Abstracter's note: Complete translation]

Card 3/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, F. A., and PALEYEV, I. I.

"Heat Transfer From walls to a Gas Flow Saturated with Drops of Evaporated Liquid."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

L 35846-66 EWP(m)/EWT(l)/EWT(m) IJP(c) JAJ/WW/JW

ACC NR: AP6014990 SOURCE CODE: UR/0170/66/010/005/0620/0625

56
B

AUTHOR: Agafonova, F. A.; Filippovich, B. S.

ORG: Polytechnic Institute im. M. I. Kalinin, Leningrad (Politekhnicheskiy institut)

TITLE: Investigation of the critical heat fluxes in the high velocity flow of a gas-liquid mixture at low pressures

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 10, no. 5, 1966, 620-625

TOPIC TAGS: heat transfer, heat flux, gas flow, liquid flow, SURFACE FILM, PIPE FLOW, VAPORIZATION

ABSTRACT: If the velocity of the movement of a liquid in a film is sufficiently large, the process of vapor formation at the tube wall can be suppressed by convection, and vaporization of the liquid takes place only from the surface of the film. The main difference in the mechanism of the boiling crisis in this case from the boiling crisis in the usual case consists in the fact that a sharp worsening in heat transfer conditions occurs as a result of the total vaporization of the liquid phase. The article shows motion picture photos which show that with an increase in the heat load from 0 to 1.5 watts/m^2 the film disappears and destruction of the plate takes place. The article gives a mathematical

UDC: 536.423.4

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

ACC NR: AP6014990

treatment of the subject, based on the assumption that, in the absence of a heat flux, the film at the wall has a constant thickness. The results show that the specific heat flux of the flow increases with an increase of the liquid content of the flow, and decreases with an increase in the vapor flow rate. An increase in the length of the working section leads to a decrease in the critical heat flux. Orig. art. has: 8 formulas and 2 figures.

SUB CODE: 20/ SUBM DATE: 11Jan66/ ORIG REF: 003/ OTH REF: 007

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

L 08553-67 EWP(j)/EWT(m) IJP/WW/GW/GD

ACC NR: AT6032000 SOURCE CODE: UR/0000/66/000/000/0241/0251

AUTHOR: Agafonova, F. A. (Leningrad); Gurevich, M. A. (Leningrad); Tarasova, Ye. F. (Leningrad)

60
55

ORG: none

TITLE: Self ignition and the induction period of liquid fuel droplets

SOURCE: Teplo- i massoperenos, t. 4: Teplo- i massoobmen pri khimicheskikh prevrashcheniyakh v tekhnologii (Heat and mass transfer, v. 4: Heat and mass transfer during chemical transformations). Minsk, Nauka i tekhnika, 1966, 241-251

TOPIC TAGS: air fuel combustion, hydrocarbon fuel, liquid fuel, ignition, ~~induction period~~, octane, cetane, FUEL IGNITION

ABSTRACT: The ignition of hexane, n-octane, and cetane droplets (0.0014—0.002 m in diameter) was studied by suspending the droplets from a quartz filament in a vertical tube through which preheated air was passed at velocities of 1.3—4.9 m/sec. The ignition process was studied by motion picture photography and induction time vs air temperature plots were obtained (see Figs. 1 and 2). A theoretical analysis yielded the following formula for the dimensionless induction time:

Card 1/4

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

$$F_0 = \int_{\theta_{0,1}}^{\theta_{0,2}} \frac{d\theta_0}{\frac{3}{2}\frac{\rho_0}{\rho_1}\frac{c_p}{c_1}\mathrm{Nu}\left(|\theta_0'| - \frac{1}{qn_{k1}}\right)\ln\eta_1},$$

where θ_0 is the reduced temperature during the induction period; $\theta'_0 = 1/qn_{k1}$; q, heat of reaction; n_{k1}, oxygen concentration; ρ_1, density of liquid; ρ_0, density of gas; c_p, heat capacity of gas; c_1, heat capacity of liquid; $\eta_1 = 1/1-n_{p0}$; and n_{p0} is the concentration of oxygen in vapor. The results of numerical integration for n-octane and cetane are shown in Figures 3 and 4, respectively. It is concluded that the studied fuels cannot ignite at the wet bulb temperature but they always ignite at a lower temperature. The induction time changes with the temperature of the medium faster than the temperature gradient across the droplet-medium interphase. The reduced film model used, which allows for the kinetic resistance, permits the approximate calculation of the ignition limits, the surface temperature of the droplet prior to ignition, and the induction period. Bao Ke-da and I. M. Sulima participated in the work. Orig. art. has: 7 figures, 24 formulas, and 2 tables. [WA No. 68]

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

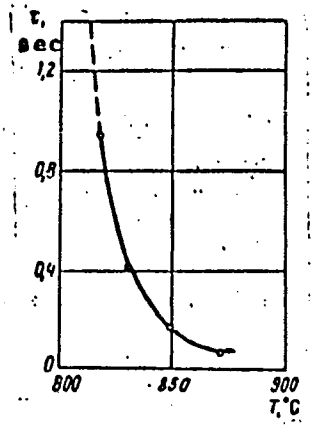


Fig. 1. Induction time of n-octane (0.0015—0.0018 m in diameter) vs air temperature at 4 m/sec (τ is induction time)

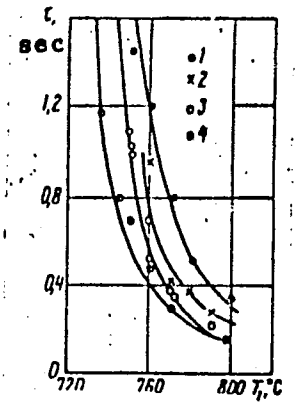


Fig. 2. Induction time of cetane vs air temperature (0.0018—0.002 m in diameter) at flow velocities

1 - 3.8 m/sec; 2 - 3.1 m/sec; 3 - 2.6 m/sec; 4 - 1.3 m/sec.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

L 08553-67

ACC NR: AT6032000

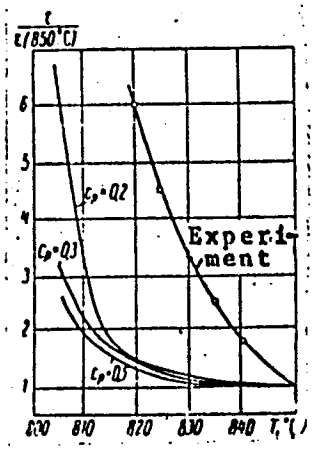


Fig. 3. Numerical integration for octane

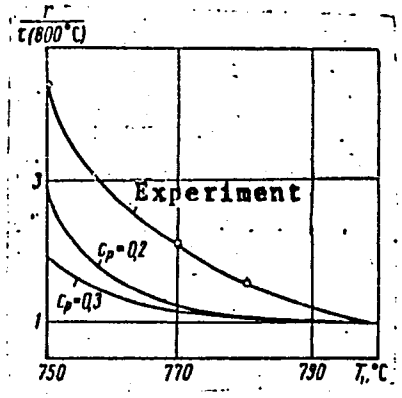


Fig. 4. Numerical integration for cetane

SUB CODE: 21/ SUBM DATE: 25Apr66/ ORIG REF: 003/ OTH REF: 001

Card 4/4

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

LIPSHITS, B.M.; ANDREYCHUK, A.M.; AGAFONOVA, G.S.

Colorimetric determination of copper in metallic mercury. Zav. lab. 30 no.9:1075 '64. (MIRA 18:3)

1. Moskovskiy institut stali i splavov.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

DREL', K.A.; AGAFONOVA, I.M.

Enzymes of urea formation in chick embryo tissues. Biokhimiia 29 no.3:452-456 My-Je '64. (MIRA 18:4)

1. Kafedra biokhimii Luganskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, K.G.

Hydrochemical characteristics of the rivers of Kamchatka. Vop. geog. Kamch. no. 2:46-55 '64 (MIRA 19:1)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

KABOSHINA, Ye.S.; LIVSHITS, A.G.; OSIPOVA, V.P.; IVANOV, P.V.; AGAFONOVA, K.I.

Some new synthetic odorous substances. Trudy VNIISNDV no.6:85-90 '63. (MIRA 17:4)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

L 54819-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5013732 UR/0138/65/000/005/0006/0010
678.763.2:678.043:678.63

AUTHORS: Makarova, L. V.; Zakharov, N. D.; Agafonova, K. I.

TITLE: Effect of the molecular weight of epoxy resins on the vulcanization of chloroprene rubber

SOURCE: Kauchuk i rezina, no. 5, 1965, 6-10

TOPIC TAGS: vulcanization, vulcanizate, vulcanized rubber, chloroprene, epoxy resin, rubber mixture, vulcanizate fatigue, rubber property, rubber technology/E 40 resin, E 41 resin, E 44 resin, E 49 resin, neoprene A rubber

ABSTRACT: The effect of the molecular weight of resins (E-40, E-41, E-44, and E-49) on the vulcanization of neoprene A rubber was investigated on mixtures filled and not filled with lamp black but containing additional stearic acid. The samples were rolled in the laboratory and vulcanized in hydraulic steam presses at 143C. Their space-lattice density was determined according to the balanced-swelling method described by A. G. Shvarts (Kauchuk i rezina, No. 7, 31, 1957), and their scorching tendency according to the plasticity variation after heating in the press at various temperatures and at 20 atm pressure for 30 min.

Card 1/5

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

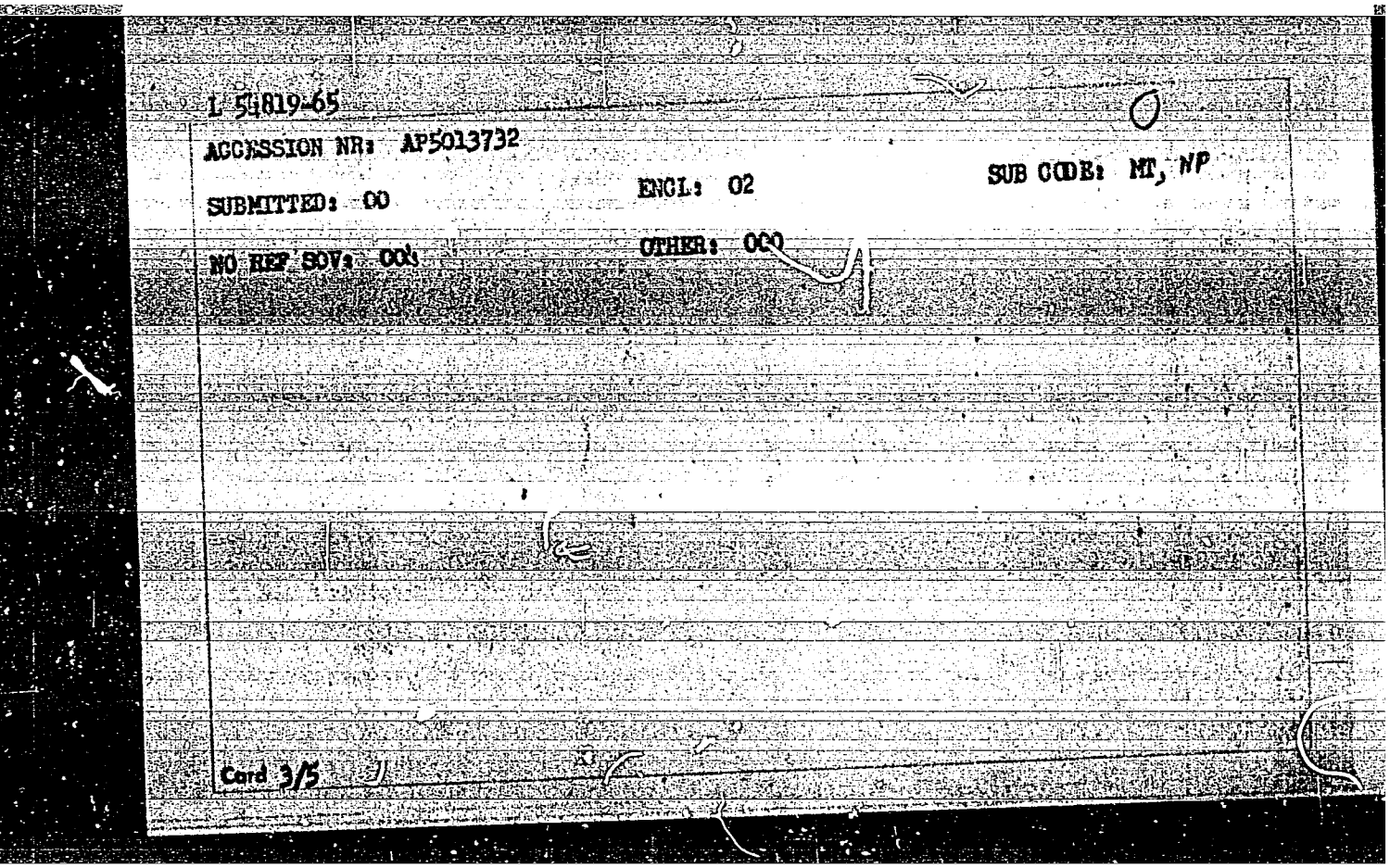
"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

It was noted that the plasticity of the neoprene A (without the vulcanizate) did not change up to 130C, but decreased suddenly with higher temperatures. The metal oxides accelerated this process. Epoxy resins increased the initial plasticity of the mixtures studied, with E-40 producing the maximum effect. They also accelerated the appearance of the cross-linked structure, the intensive formation of which began at 120-130C. Plasticity variation is shown graphically in Fig. 1 on the Enclosure, and the kinetics of the cross-structure formation in Fig. 2. The cross-links concentration in the epoxy rubbers was lower than in the metallo-oxide ones, and higher than in the thermo-vulcanized types. Their modulus at 300% elongation increased with the increase in molecular weight, while the strength and the comparative elongation were decreased. These characteristics are explained by the strengthening of intermolecular bonds in rubber under the action of epoxy resins. The comparison of chloroprene rubber properties with those of standard types revealed a higher resistance to fatigue, lower heat production, and stronger adherence to brass-covered metals. The best results were obtained with E-40 and E-41 resins. Orig. art. has: 1 table and 5 figures.

ASSOCIATION: Yaroslavskiy tekhnologicheskikh institut (Yaroslavl Technical Institute)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1



L 54819-65

ACCESSION NR: AP5013732

SUBMITTED: 00 ENCL: 02 SUB CODE: MT, NP

NO REF SOV: 000 OTHER: 000

Card 3/5

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

1. AGAFONOVA, L. D., NEFED'YEVA, A. I.

2. USSR (600)

4. Transit Circle

7. Meridian circle of the Engel'gardt Astronomical Observatory from 1903 to 1951. Uch. zap. Kazan. un., 111, No. 9, 1951.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, L.D.; NEFED'YEVA, A.I.

Absolute declinations of 536 stars cited in the basic catalogue of faint stars. Uch.zap.Kaz.un. 113 no.6:3-116 '53. (MLRA 10:3)
(Stars--Observations)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, L.D.; NEFED'YEVA, A.I.

Relative determinations of declinations of 131 stars observed according to the program for Poltava and Kazan zenith telescopes. Uch.zap.Kaz.un. 116 no.7:3-46 '56. (MLRA 10:3)

(Stars)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, L.D.; NEFED'YEVA, A.I.

Shortcomings in the graduation of the transit circle at the Engel'gardt Observatory. Uch.zap.Kaz.un. 116 no.7:46-50 '56. (MLRA 10:3)
(Transit circle)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

PRAVE, V.Ye.; ROMAKINA, A.V.; AGAFONOVA, L.I.

Systematic bacteriological control over level of sanitation in nursery schools. Gig. i san. no.7:49 Jl '54. (MLRA 7:8)

1. Iz laboratorii Sverdlovskoy rayonnoy sanitarno-epidemiologicheskoy stantsii Moskvy.
(SCHOOL HYGIENE)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

FRAVE, V.Ye., vrach; AGAFONOVA, L.I., bakteriolog

Prophylactic disinfection of dishes in children's institutions. Gig. i san. 21 no.9:75-78 S '56. (MLRA 9:10)

1. Iz laboratorii sanitarno-epidemiologicheskoy stantsii Sverdlovskogo rayona Moskvy.

(ANTISEPSIS AND ASEPSIS
disinfect.
of dishes in children's institutions)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

DAVYDOV, Yu.S., kand. tekhn. nauk; AGAFONOVA, L.I., inzh.; ADAMOVICH, P.V., inzh., red.

[New modernized devices and methods of automating sanitary engineering installations] Novye modernizirovannye pribory i sredstva avtomatizatsii sanitarno-tekhnicheskikh ustroistv. Moskva, Biuro proektno-konstruktorskoe, i tekhnicheskoi pomoshchi, 1962. 39 p. (MIRA 16:4)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut sanitarnoy tekhniki.
(Sanitary engineering) (Automatic control)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, L.I.

Some supplements to the method of bacteriological investigation of whooping cough. Lab. delo 6 no.5:13-14 S-O '60. (MIRA 13:9)

1. Bakteriologicheskaya laboratoriya sanitarno-epidemiologicheskoy stantsii Sverdlovskogo rayona (glavnyy vrach M.G. Gilel's), Moskva.
(WHOOPING COUGH)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, L.I.

Modification of the study method for pathogenic Escherichia coli.
Lab.delo 7 no.9:37-38 S '61. (MIRA 14:10)

1. Laboratoriya sanitarno-epidemiologicheskoy stantsii Sverdlovskogo rayona (glavnyy vrach M.G.Gilel's), Moskva.
(ESCHERICHIA COLI)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

21(8) SOV/119-59-1o-18/19

AUTHORS: Agafonova, L. I., Engineer, Davydov, [illegible] S., Candidate of Technical Sciences

TITLE: The Results of the Laboratory- and Working Tests of the Dilatometric Temperature Feeler of the Type DTDP

PERIODICAL: Priborostroyeniye, 1959, Nr 1o, pp 31 - 32 (USSR)

ABSTRACT: The dilatometric pneumatic temperature feeler of the type DTDP, modernized at the Khar'kovskiy zavod "Teploavtomat" (Khar'kov factory "Teploavtomat"), was investigated at the laboratory for the automation of sanitary-technical devices of the Nauchno-issledovatel'skiy institut sanitarnoy tekhniki Akademii stroitel'stva i arkhitektury SSSR (Scientific Research Institute of Sanitary Technics of the Academy for Building and Architecture USSR), and the paper by V. M. Gorokhov and G. Ye. Kovalevskiy in the present issue is referred to at the beginning. The error of the instrument was first investigated, and it appeared that the measuring error had a positive value at the beginning of the dial, but a negative value at its end. This is shown graphically on the diagram in figure 1. The maximum error, however, does

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

not exceed $\pm$ 0.45°C, and thus remains within the limits permissible technically. The temperature difference, within which a change of pressure from a minimum to a maximum occurs at the exit, was investigated in the course of the further investigation. Since this temperature difference in such instruments depends on the degree of throttling in the valve, the minimum temperature difference, at which a pressure change from the minimum (0$\pm$0.1 kg/cm^2) to the maximum (1$\pm$0.1 kg/cm^2) can be obtained at the exit, was determined. It can be seen from figure 2 that this temperature difference amounts to 1.3 - 1.4°C. An important feature of these instruments is their inertness, and two curves are shown on the diagram in figure 3, from which it results that the inertness of the instrument is increased by a housing. It is stated in conclusion that the feeler investigated here is very suitable for air-conditioning systems, owing to the characteristics determined. There are 3 figures.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AG[illegible], L.I.; [illegible] CHIPSHIY, V.[illegible].

Thermostat manufactured by [illegible] and Braun Company. (MIRA 14:2)
Priborostroenie no. 2:25-[illegible]. (Thermostat)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, L.I., inzh.; BRODSKIY, V.N., inzh.; MIKHAYLOV, S.A., inzh.

Controlling the "dew-point" temperature in double-ventilator air-conditioning units. Vod. i san. tekh. no.11:20-22 N '64. (MIRA 18:2)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

MASLENNIKOV, K.N.; PIKOVSKAYA, O.G., starshiy nauchnyy sotrudnik; SURKOVA, V.I., mladshiy nauchnyy sotrudnik; AGAFONOVA, L.L., mladshiy nauchnyy sotrudnik

Avivage preparations for polyvinyl alcohol fibers. Tekst. prom. 25 no.9:29-31 S '65. (MIRA 18:10)

1. Rukovoditel' gruppy tekstil'noy pererabotki Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Maslennikov). 2. Laboratoriya otdelki i krasheniya Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Pikovskaya, Agafonova). 3. Gruppa tekstil'noy pererabotki Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Surkova).

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, L. M., Cand Med Sci -- "Study of the ~~dependence~~ effectiveness immunological activity intensity of live anti-influenza vaccine ~~on~~ and the methods of its preparation." Len, 1961. (Len State Order of Lenin Inst ~~of~~ Advanced Training of Physicians im S. M. Kirov) (KL, 8-61, 258)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, L.M.

Immunological effectiveness of vaccine against influenza. Vop. virus. 6 no.5:627 S-O '61. (MIRA 15:1)

1. Leningradskiy institut vaktsin i syvorotok, Leningrad.
(INFLUENZA)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

ACC NR: AP6034185 (N) SOURCE CODE: UR/0250/66/010/010/0748/0751

AUTHOR: Avdeyev, V. N. (Corresponding member AN SSSR); Agafonova, M. A.; Aleksandrov, V. K.

ORG: none

TITLE: Method of designing combined electronic devices with a plane-parallel electrode system

SOURCE: AN BSSR. Doklady, v. 10, no. 10, 1966, 748-751

TOPIC TAGS: vacuum tube, electron tube, triode tube, pentode electron tube, electron tube anode, electron tube cathode, electron tube grid, electron tube filament

ABSTRACT: The authors point out the numerous advantages of plane-parallel element configuration in multiple purpose vacuum tubes, as compared with conventional coaxial design. The coaxial construction of complex multi-purpose vacuum tubes is not suitable for automation. The stability of the construction, especially of the grids (which are formed in spirals), is poor, as is the utilization of the envelope space. The authors designed a triode-dual pentode tube intended to serve as an audio output stage in radio and TV sets. The triode can be used as a phase inverter, and the two pentodes are connected in push-pull form. The elements are formed in plane-parallel, rather than cylindrical-coaxial configuration. The parameters of this tube are superior to those

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

3643
S/137/62/000/003/109/191
A060/A101

18.1200

AUTHORS: Baron, V. V., Agafonova, M. I., Savitskiy, Ye. M.

TITLE: Structure and characteristics of alloys of the niobium vertex of the niobium-vanadium-aluminum system

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 9-10, abstract 3I62 ("Tr. In-ta metallurgii, AN SSSR", 1961, no. 8, 269-277)

TEXT: A study was made of the Nb vertex of the Nb-V-Al system at a content of up to 10% V and Al. The alloys were smelted from alumothermic V (96.5%), metalloceramic Nb (99.1%) and Al (99.99%) in an arc furnace in a He environment, were annealed at 1,100°C for 50 hours and hardened in the ТВВ-2 (TVV-2) furnace at 1,600°C. The investigation was carried out by the methods of thermal microscopic, and X-ray structure analyses, hardness measurements, microhardness measurement, fire-resistance determination. The smelting temperature of the alloys was determined by the drop test method. The isothermal section of the Nb vertex of the Nb-V-Al system at 20°C and the vertical section at a ratio of V : Al = 1.4 were constructed. At a content of 4% V in Nb at room temperature up

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

Structure and characteristics ...

to 6% Al can be dissolved. V and Al raise the fire-resistance of Nb which is maximum in alloys with 3 - 8% V and ~1% Al and 1.8 - 2.2% V and 3.2 - 4.8% Al. There are 7 references.

Z. Rogachevskaya

[Abstracter's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

L 6390-66 EWT(m)/EPF(c)/EWP(j) RM

ACC NR: AP5026740 SOURCE CODE: UR/0286/65/000/017/0016/0016

INVENTOR: Lel'chuk, S. L.; Ivanova, N. A.; Vabel', Ya. I. (Deceased); Agafonova, M. I.; Frangulyan, G. D.; Semyannikova, A. M.

ORG: none

TITLE: A method for producing dimethyldichlorosilane. Class 12, No. 174185

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 16

TOPIC TAGS: silane, dimethyldichlorosilane, silicone

ABSTRACT: This Author's Certificate introduces a method for producing dimethyldichlorosilane by interacting methyl chloride with a silicon-copper alloy treated with a cadmium compound. The product yield is increased by using cadmium chloride in the amount of 4.3% of the weight of the alloy and subjecting the processed alloy to thermal treatment at 180°C.

UDC: 547.419.5.07

SUB CODE: GC,OC/ SUBM DATE: 27Oct62/ ORIG REF: 000/ OTH REF: 000

Card 1/1

0902 0141

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, O. and [illegible]

"Quality and Economy; a Word to Friends," Tekh. Molod., No.2, 1952

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

KISTYAKOVSKIY, A.B.; AGAFONOVA, O.Ya.

Acclimatization of pheasants (Phasianus colchicus L.) in the Ukrainian S.S.R. Nauk.zap.Kiev.un.13 no.12:73-86 '54.(MLRA 9:10)
(Ukraine--Pheasants)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFonova, S. M.

PHASE I BOOK EXPLOITATION SOV/1459
SOV/2-8-58

Leningrad. Glavnaya geofizicheskaya observatoriya

Voprosy obshchey i sinopticheskoy klimatologii (Problems in General and Synoptic Climatology) Leningrad, Gidrometeoizdat, 1960. 141 p. (Series: Its: Trudy, vyp. 88) Errata slip inserted. 1,000 copies printed.

Additional Sponsoring Agency: USSR. Sovet Ministrov. Glavnoye upravleniye gidrometeorologicheskoy sluzhby.

Ed. (Title Page): O. A. Drozdov, Doctor of Geographical Sciences; Ed. (Inside book): S. V. Obukhova, Tech. Ed.: M. Ya. Flaum.

PURPOSE: This publication is intended for meteorologists and synoptic climatologists.

COVERAGE: This issue of the Main Geophysical Observatory's Transactions contains 12 articles dealing with wind-caused redistribution of precipitation, ice accretion under various relief conditions, the characteristics of snow deposition, and forest shelter belts. The microclimatic peculiarities of a large city are analyzed. An evaluation of the velocity of moisture dispersion and transfer is attempted. Variability in the lower boundary of cloudiness and the possibility of analyzing temperature anomalies by taking into account the forms and intensity of circulation are discussed. The relationship between the variability of precipitation and the forms of atmospheric circulation is examined. The climatic conditions in individual regions of the USSR are described in three articles. No personalities are mentioned. References follow each article.

Rubinshteyn, Ye. V. The Problem of the Relationship Between the Amount of Ice Deposited on Wires and the Relief 25

Pogosyan, Kh. P. In Defense of the Theory of Forest [Shelter] Belt Construction Types 33

Shishkina, L. A. Influence of a Large City Upon the Temperature, Air Humidity, and Precipitation 43

Nikol'skiy, Yu. N. Variability in the Height of the Lower Boundary of the Lower Cloud Level 59

Drozdov, O. A. The Velocity of Moisture Spread Over a Given Territory 69

Grigor'yeva, A. G. Relationship Between the Average and the Turbulent Transfer of Moisture Over the European USSR 73

Vorob'yeva, Ye. V. Many-Sided Use of the Characteristics of the Form and Intensity of Circulation in Forecasting Monthly Temperature Anomalies 96

Dzhordzhio, T. I. Climatic Changes in the Central Chernozem Oblasts 111

Nikol'skiy, K. A. Formation of Secondary Cyclones Over the Southern Regions of the Krasnoyarskiy Kray 125

Agafonova, S. M. Variability of the Total Precipitation During the Spring-Summer Period Over the Arid Regions of European and Asiatic USSR in Relation to the Variability of the Elements of Total Atmospheric Circulation 133

AVAILABLE: Library of Congress

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

KULIKOV, N.V.; PORYADKOVA, N.A.; AGAFONOVA, S.V.; TIMOFEYEV-RESOVSKIY, N.V.

Action of radiators on phytocenoses and the effect of the latter on the migration and redistribution of radioisotopes in soils. Trudy Inst.biol.UFAN SSSR. no.22:31-47 '62. (MIRA 16:3)
(RADIOISOTOPES) (PLANTS, EFFECT OF RADIATION ON) (SOILS)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, S.Ya.; ZAGREBINA, Ye.A.

Cases of epidemic hemorrhagic fever. Sov.med. 21 no.12:83-86 D '57. (MIRA 11:3)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav.-prof. S.V. Shestakov) Kuybyshevskogo meditsinskogo instituta i iz terapevticheskogo otdeleniya (zav. Ye.A.Zagrebina) Borskoy rayonnoy bol'nitsy Kuybyshevskoy oblasti.
(EPIDEMIC HEMORRHAGIC FEVER, case reports (Rus)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, S.Ya.

Glycemic crises and the state of the basic nervous processes in chronic hepatitis. Trudy Kuib.med.inst. 11:78-84 '60.
(MIRA 15:8)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. kafedroy prof. S.V.Shestakov) Kuybyshevskogo meditsinskogo instituta.
(LIVER—DISEASES) (BLOOD SUGAR) (NERVOUS SYSTEM)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

KARASEVA, A.F.; AGAFONOVA, T.D.; KALININA, O.M.; CHADAYEVA, Z.N.

Specialization in the manufacture of technical rubber goods is the most important problem. Kauch. i rez. 24 no.8:46-50 '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

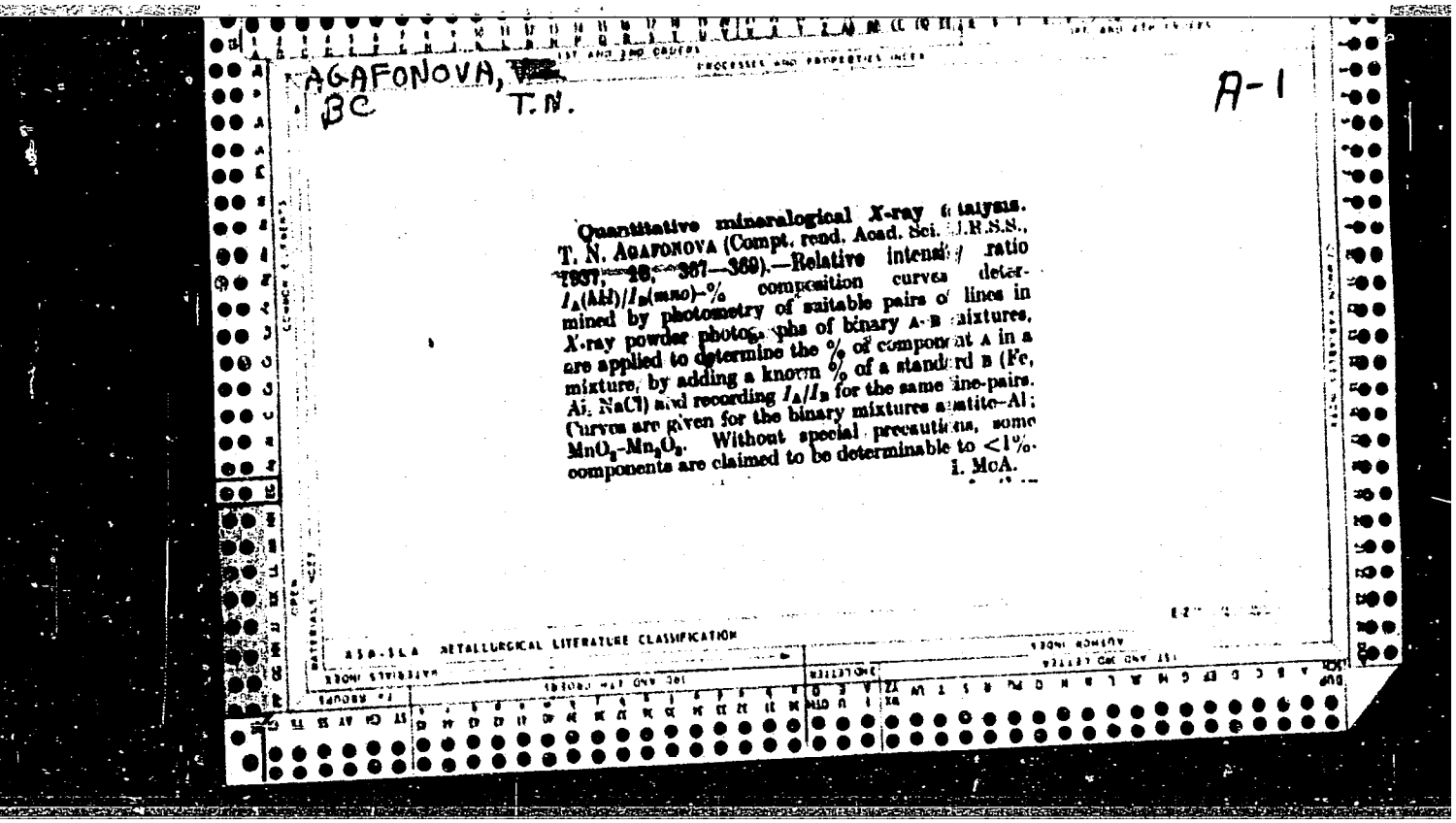
GAVRUSEVICH, B.O. [Havrusevych, B.O.], kand.geol.-mineral.nauk;
AGAFONOVA, T.M., kand.geol.-mineral.nauk

Soviet diamonds. Nauka i zhyttia 10 no. 12:14-16 D '60. (MIRA 14:4)

(Diamonds)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1



AGAFONOVA, T.N.

BC

A-1

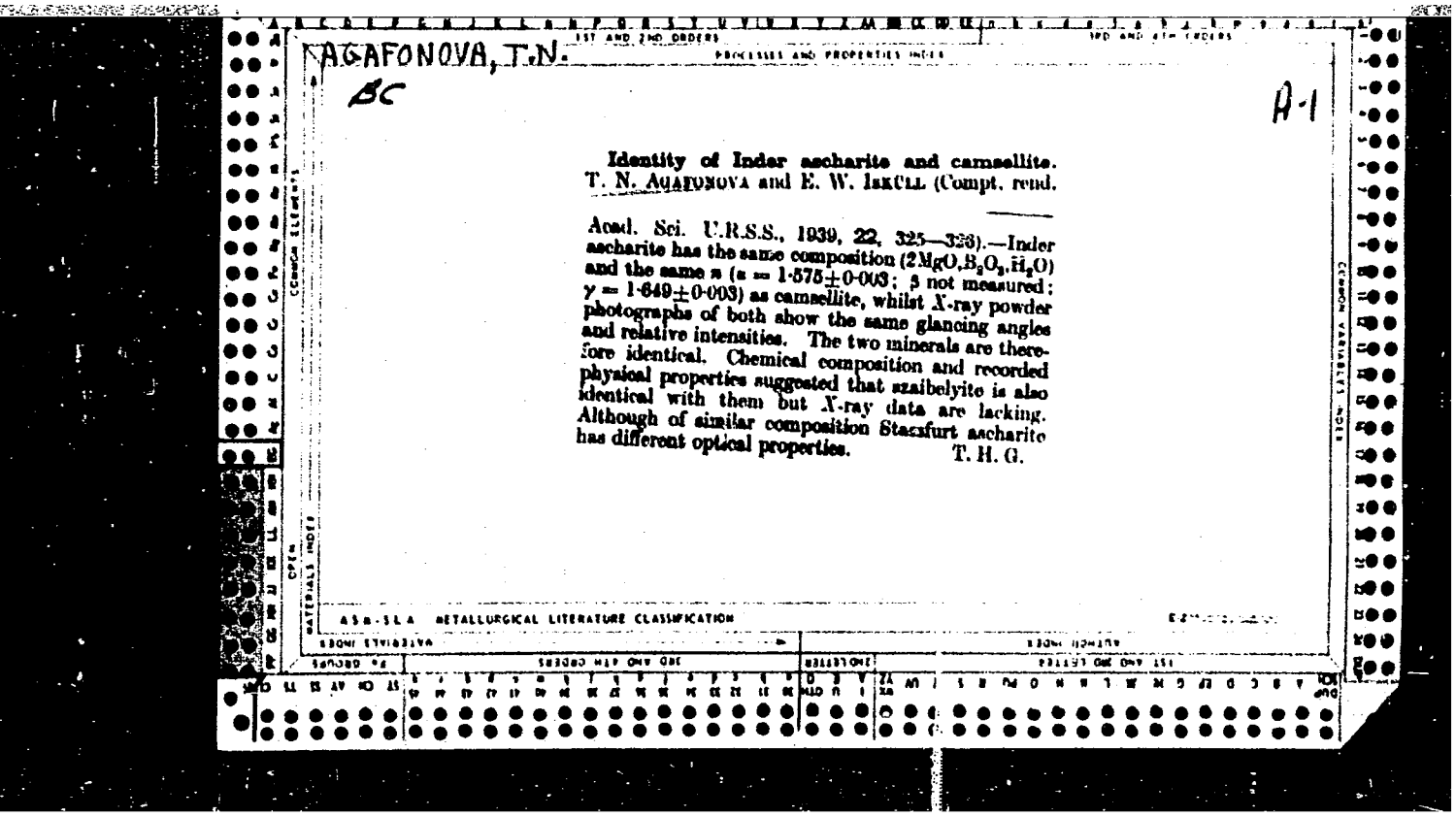
Quantitative mineralogical X-ray [illegible]taiysis. T. N. AGAFONOVA (Compt. rend. Acad. Sci. U.R.S.S., 1937, 16, 367—369).—Relative intensity ratio $I_A(hkl)/I_B(mno)$–% composition curves determined by photometry of suitable pairs of lines in X-ray powder photographs of binary A–B mixtures, are applied to determine the % of component A in a mixture, by adding a known % of a standard B (Fe, Al, NaCl) and recording I_A/I_B for the same line-pairs. Curves are given for the binary mixtures hæmatite–Al; MnO_2–Mn_2O_3. Without special precautions, some components are claimed to be determinable to <1%.

I. McA.

A58-51A METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1



AGAFONOVA, T.N.

BC

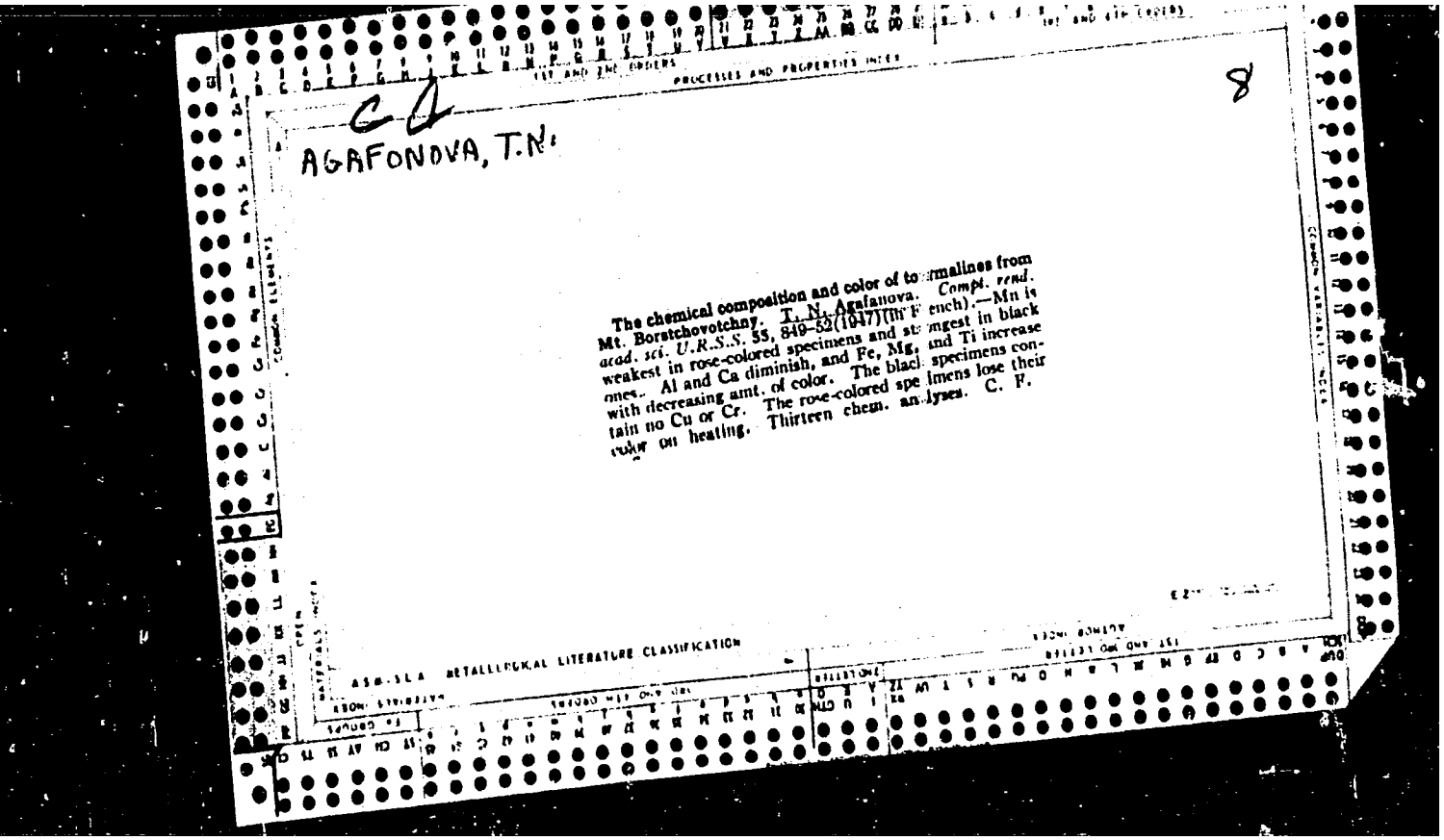
A-1

Identity of Inder ascharite and camsellite.
T. N. AGAFONOVA and E. W. ISAKELL (Compt. rend. Acad. Sci. U.R.S.S., 1939, 22, 325—328).—Inder ascharite has the same composition ($2MgO,B_2O_3,H_2O$) and the same n ($\alpha = 1{\cdot}575 \pm 0{\cdot}003$; β not measured; $\gamma = 1{\cdot}649 \pm 0{\cdot}003$) as camsellite, whilst X-ray powder photographs of both show the same glancing angles and relative intensities. The two minerals are therefore identical. Chemical composition and recorded physical properties suggested that szaibelyite is also identical with them but X-ray data are lacking. Although of similar composition Stassfurt ascharite has different optical properties. T. H. G.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1



C A

AGAFONOVA, T.N.

8

The chemical composition and color of tourmalines from Mt. Borstchovotchny. T. N. Agafanova. *Compt. rend. acad. sci. U.R.S.S.* 55, 849–52(1947)(in French).—Mn is weakest in rose-colored specimens and strongest in black ones. Al and Ca diminish, and Fe, Mg, and Ti increase with decreasing amt. of color. The black specimens contain no Cu or Cr. The rose-colored specimens lose their color on heating. Thirteen chem. analyses. C. F.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T. N.

Agafonova, T. N. "Quantitative mineralogical analysis through utilization of X-rays," Mineral. sbornik, No. 2, 1947, p. 113-20

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

CA AGAFONOVA, T.N.

Crystallographic study of tourmalines. T. N. Agafonova (T. G. Shevchenko State Univ., Kiev). *Doklady Akad. Nauk S.S.S.R.* 65, 207-9(1949); cf. *C.A.* 42, 68c.—The tourmaline crystals of the Horshchevochno Mts. (200 samples were examd.) are striking in their unusual variability of color, which may be uniform in the crystal, or highly variable in the same individual. Rose, pink, red, green, brown, and black hues are abundant. The cyrstallographic description, combined with the pyroelectric examn. of the analogous and antilogous poles, shows no direct relation between staining and crystallographic orientation. They all are typical pegmatite Na-Li tourmalines. W. Eitel

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

CH AGAFONOVA, T.N.

Vesuvianites from the Daham deposits. T. N. Agafonova and V. P. Svistunenko (Kiev. Gosudarstv. Univ. im. T. G. Shevchenko). *Doklady Akad. Nauk S.S.S.R.* 68, 373-5(1949).—The skarn rocks of Dzham (Samarkand region) consist of strongly metamorphosed Upper-Silurian sediments, with intrusions of Variscian sills. They originated from calcareous rocks intercalated between mica schists which are changed by contact with two-mica granites and hornblende-diorites. Quartz, calcite, apatite, diopside, actinolite, garnet (grossularite-andradite), labradorite, epidote, zoisite, chlorite, sphene, and vesuvianite are the characteristic minerals of this skarn paragenesis. The vesuvianite crystals are radial-divergent, columnar, of very variable color, max. length 4 cm., 1-2 cm. wide; d. 3.3-3.41. The optical properties are detd. by the chem. compn.: Ti and Fe-rich brown vesuvianite shows higher ns; γ = 1.701-1.718; ω = 1.695-1.710; $\gamma - \omega$ = 0.006-0.008. The chem. analyses show a rather high Fe^{+} content (2.94-3.90%), and TiO$_2$ up to 0.80% Characteristic relictic inclusions of diopside and garnet in vesuvianite indicate the genesis of the latter mineral by metamorphic chem. reactions in the calcareous skarns, brought about by hydrothermal solns. and magmatic emanations. The younger, brown colored vesuvianite crystals show that during these reactions the fluid phases were enriched with Ti, Fe, and Mg, while Al was decreased.

W. Fitel

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T. N.

Iridescence of labradorite of Volyn. T. N. Agafonova (Kiev Univ.). *Mineralog. Sbornik, L'vov, Geol. Obshchestvo* 4, 228-34(1950); cf. *C.A.* 49, 14911.—A. reviews various theories relating to the cause and nature of the iridescence and concludes that it is controlled by deformation of the crystal lattice and, as demonstrated by its zonal pattern, by certain crystallographic axes. Marie Siegrist

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T.N.

Morphology of tourmalines of the Borshchovochnyy ridge. Nauk. zap.Kiev.un. 9 no.10:59-68 '50. (MLRA 9:10)

(Borshchovochnyy Range--Tourmaline)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

1. AGAFONOVA, T.N.

2. USSR (600)

4. Chemistry

7. Two hundredth anniversary of the "Address on the benefits of chemistry." Ukr. khim.zhur. 17 no. 6, 1951.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA T. N.

4

M. V. Lomonosov and current crystallochemical ideas.
T. N. Agafonova. *Naukovi Zapiski Kiivs'k. Derzhav. Univ.* 12, No. 4, 97–105(19 ks); *Referat. Zhur., Fiz.*, 1955, No. 4721.—A. claims that the works of L. on the theory of the structure of substances contain the basic ideas and conceptions of current crystallochemistry.

Lomonosov, Mikhail Vasil'evich, 1711-1765

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T.N.

Influence of Heating on Iridescence of Labradorites in the Novyy Bobrik Deposits, T.N.Agafonova, Kiev State U im. Shevchenko. DAN SSSR, Vol 89,no.5,pp.933-936, Apr 53.

Eight expts. on subject labradorites with temps. ranging from 250° to 1300°. Concludes that raising temp. and increasing duration of heating cause the minerals gradually to brighten and become white at 1250° to 1300°; a rust-brown aureole is noticed around the minerals at temp. 300° to 400° and up. Crazes in specimens are evident macroscopically after heating to over 1000°. Presented by Acad D.S.Belyankin.

259T36

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T. N.

USSR/Minerals - Petrography

Card : 1/1

Authors : Agafonova, T. N.

Title : Fringe iridescence of labradorite

Periodical : Dokl. AN SSSR, 96, Ed. 6, 1237 - 1239, June 1954

Abstract : The author analyzes the results of microscopic study of fringe iridescemce of labradorite (Labrador feldspar). The extinction of labradorite is often spotted. The iridescence borders are always coordinated with the boundaries of the non-simultaneously extinguishing parts of the labradorite grain. One reference. Table, graph.

Institution : The T. G. Shevchenko State University, Kiev

Presented by : Academician N. V. Byelov, April 14, 1954

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

Agafonova, T. N.

GP

Spotwise iridescence and extinction in gabbro plagioclases of Ukraine. T. N. Agafonova (Shevchenko State Univ., Kiev.). *Doklady Akad. Nauk S.S.S.R.* 103, 1097–8(1955).—With universal-stage methods, measurements of the extinction angles α: trace of (001) on (010) sections, of $2V_\alpha$ and for the orientation of the indicatrix were made. Studies of the optical phenomena in reflected light make evident that the spotwise iridescence does not depend on oriented acicular inclusions but on the different chem. compn. of areas with variable iridescence. The compns. vary between $Ab_{74}An_{26}$ and $Ab_{51}An_{49}$, mainly labradorite, only scarce andesite or bytownite compns. The optical consts. are not disturbed; the indicatrix orientation is distinct in the single areas; a plastic deformation of the crystals is observed only locally. W. Eitel

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

15-57-4-4609

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4, p 89 (USSR)

AUTHOR: Igafonova, T. N.

TITLE: The Nature of Iridescence in Labradorite (K voprosu o prirode irazatsii labradorov)

PERIODICAL: Mineralog. sb. L'vovsk. geol. o-vo pri un-te, 1956, Nr 10, pp 263-272.

ABSTRACT: The study of iridescent labradorite from Ukrainian deposits by use of the polarizing microscope has permitted the clarification of several peculiar features relating to iridescence. A coincidence was noted between the patterns of fringing, patchy, and zonal iridescence and the patterns of repetitive patchy and zonal extinction in labradorite grains. Patchy extinction in labradorite corresponds to inhomogeneities in the chemical composition of sections of the grain. The chemical composition of the iridescent parts ranges from An_{49} to An_{52} according to L. I.

Card 1/4

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

The Nature of Iridescence in Labradorite (Cont.)

Pozyuk, and from An_{46} to An_{76} according to the author. The study of the relationship of iridescent color to the chemical composition was made by measuring the extinction angles of Np' against (001) in the (010) plane in thin sections cut parallel to (010). The following sequence of iridescent colors was observed in the iridescent patterns of plagioclase from the deposits of Golovino, Slobodka, Kamennyy Brod, and Gorbylev: violet, dark blue, azure, green, yellow. The measurements of extinction angles showed that the angle increased for successive colors as listed above; i.e., the yellow color represents more basic plagioclase. In different specimens having uniform iridescent colors, the extinction angles of the parts of the mineral are different and the values range between limits that correspond to the plagioclases from An_{46} to An_{76}. The influence of metasomatism on iridescence is demonstrated. One may occasionally find pegmatitic veinlets in the labradorite, observed under the microscope. These veinlets consist of orthoclase and quartz in graphic intergrowth associated with apatite. The quartz and orthoclase form fine branchlets that extend into the interior of large iridescent labradorite grains. In such crystals there is a sharply defined irregu-

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

The Nature of Iridescence in Labradorite (Cont.)

heating or that structural change has occurred that leads to the elimination of iridescence.

Card 4/4

G. A. G.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

15-57-4-4608

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4, p 89 (USSR)

AUTHOR: Agafonova, T. N.

TITLE: Chlorophaeite in Basalts From Volynia (O khlorofeite iz bazal'tov Volyni)

PERIODICAL: Mineralog. sb. L'vovsk. geol. o-vo pri un-te, 1956, Nr 10, pp 346-352.

ABSTRACT: A chlorite-like dark green mineral has been discovered in the basalts in the quarries of the Dolgoye Pole, Rovenskaya oblast'. Little pellets of the mineral seem very slippery to the touch, have a high viscosity, and are easily cut by a knife. In immersion oils the mineral appears as brown flakes with irregular outlines. It is isotropic or weakly translucent, uniaxial, and negative; Nm is 1.561 to 1.570. The chemical composition (in percent) is SiO_2 37.60, TiO_2 0.05, Al_2O_3 6.35, Fe_2O_3 11.07, FeO 9.80, MnO 0.06, Mg 14.48, CaO 2.78, Na_2O 0.50, K_2O 0.09, H_2O 16.92. The thermal and

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

15-57-3-3349

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3, p 130 (USSR)

AUTHORS: Soloninko, I. S., Agafonova, T. M.

TITLE: Light-Colored Labradorite from Vas'kovichi and Mezherichka in Volynskaya Oblast' (O svetlom labradorite sela' Vas'kovichi i Mezherichki na Volyni) (in Ukrainian)

PERIODICAL: Nauk. Zap. Kyyivs.'k. un-ta, 1956, Vol 15, Nr 2, pp 129-135

ABSTRACT: South of Korosten' on the Uzh River and on its left-hand tributary, the Shesten', three areas are found where light-colored labradorites are exposed: 1) the right bank of the Shesten' River, near Vas'kovichi; 2) the right bank of the Uzh River, at Mezherichka; and 3) the left bank of the Uzh River, in the "Krutaya Izluchina" sector. The physical and mechanical properties of the labradorites from the "Krutaya Izluchina" sector and from Vas'kovichi are given (see Table). Experiments showed that the light-colored labradorites

Card 1/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

Light-Colored Labradorite (Cont.)

Name of locality	Specific gravity	Bulk weight	Crushing limit when dry kg/cm^2	Crushing limit after soaking kg/cm^2	Porosity	Water absorption
Krutaya Izluchina	2.69	2.63	800	650	1.10	0.30
Vas'kovichi	2.72	2.66	785-1179	undet	0.40-0.80	0.11-0.14

Card 3/3

S. P. Sh.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T.N.; GAVRUSEVICH, B.A.; ZHOVINSKIY, E.Ya.; OVCHAROVA, Z.G.

Morphology of gabbro ilmenites and primary kaolins in Volhynia. Min.sbor. no.11:42-44 '57. (MIRA 13:2)

1. Gosuniversitet im. T.G.Shevchenko, Kiyev.
(Volkhynia--Ilmenite) (Volhynia--Kaolin)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

GAVRUSEVICH, B.A.; BAZHENOVA, L.N.; AGAFONOVA, T.N.

Finds of phenacites in Volhynian pegmatites. Min.sbor. no.11: 346-347 '57. (MIRA 13:2)

1. Gosuniversitet imeni T.G.Shevchenko i Politekhnicheskiy institut, Kiyev.
(Volhynia--Phenacite) (Volhynia--Pegmatites)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T.M. [Ahafonova, T.M.]; LIZUNOV, M.V. [Lyzunov, M.V.]

Geochemical characteristics of Ukrainian labradorites. Nauk. zap.Kyiv.un. 16 no.14:179-188 '57. (MIRA 13:4)
(Ukraine--Labradorite)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

SHELUD'KO, T.F.; AGAFONOVA, T.N.

Staurolites from gneisses in the central part of the Azov region. Min.sbor. no.12:270-279 '58. (MIRA 13:2)

1. Gosuniversitet imeni T.G.Shevchenko, Kiyev.
(Azov region--Gneiss) (Azov region--Staurolite)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T.N.

A.E.Fersman's role in the development of crystallography; on the 75th anniversary of his birth. Izv.vys.ucheb.zav.; geol.i razv. 2 no.10:117-120 O '59.
(MIRA 13:6)

1. Kiyevskiy gosudarstvennyy universitet im. T.Shevchenko.
(Fersman, Aleksandr Ev'gen'evich, 1883-1945)
(Crystallography)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T.N.

Some morphological characteristics of zircons. Min. sbor. no.15: 65-81 '61. (MIRA 15:6)

1. Gosudarstvennyy universitet imeni T.G. Shevchenko, Kiyev. (Zircon)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T.N.

Morphology of distorted zirconium crystals as an indicator of their genesis. Dokl. AN SSSR 140 no.2:441-444 S '61. (MIRA 14:9)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko. Predstavleno akademikom N.V.Belovym.
(Malyy Kunaley region--Zirconium)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

PLATONOV, A.N., inzh., otv. red.; POVARENNYKH, A.S., doktor geologo-min. nauk, prof., glav. red.; AGAFONOVA, T.N., kand. geol-min. nauk, dots., red.; BELEVTSEV, Ya.N., prof., red.; GAVRUSEVICH, B.A., kand. geol.-min.nauk, dots., red.; GLADKIY, B.N., inzh., red.; IVANTISHIN, M.N., doktor geol.-miner. nauk, red.; KHATUNTSEVA, A.Ya., kand. geol.-miner. nauk, red.; ZAVIRYUKHINA, V.N., red.; DAKHNO, Yu.M., tekhn. red.

[Annals of the Ukrainian Branch of the All-Union Mineralogical Society] Zapiski Ukrainskogo otdeleniia Vsesoiuznogo mineralogicheskogo obshchestva. Kiev, Izd-vo AN USSR, 1962. 184 p. (MIRA 17:3)

1. Akademiya nauk URSR, Kiev. Ukrainskoye otdeleniye Vsesoyuznogo mineralogicheskogo obshchestva. 2. Chlen-korrespondent AN Ukr.SSR (for Belentsev).

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T.N.

Effect of heating on the iridescent labradorites of Golovino. Zap. Ukr. otd. Min. ob-va [no.1]:29-37 '62.

(MIRA 16:8)

1. Kiyevskiy gosudarstvennyy universitet, kafedra mineralogii i geokhimii.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

POVARENNYKH, A.S., doktor geol.-miner. nauk, prof., otv. red.; AGAFONOVA, T.N., kand. geol.-miner. nauk, dots., red.; BELEVTSEV, Ya.N., prof., red.; GAVRUSEVICH, B.A., kand. geol.-miner. nauk, dots., red.; GLADKIY, V.N., inzh., red.; IVANTISHIN, M.N., doktor geol.-miner. nauk, red.; PLATONOV, A.N., inzh., red.; KHATUNTSEVA, A.Ya., kand. geol.-miner. nauk, red.; ZAVIRYUKHINA, V.N., red.izd-va; TURBANOVA, I.A., tekhn. red.

[Theoretical and genetic problems of mineralogy and geochemistry] Teoreticheskie i geneticheskie voprosy mineralogii i geokhimii. Kiev, Izd-vo AN USSR, 1963. 165 p. (MIRA 16:12)

1. Akademiya nauk URSR, Kiev. Ukrainskoye otdeleniye Vsesoyuznogo mineralogicheskogo obshchestva. 2. Chlen-korrespondent AN Ukr.SSR (for Belevtsev).
(Mineralogy) (Geochemistry)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

POVARENNYKH, A.S., doktor geol.-miner. nauk, prof., otv. red.; AGAFONOVA, T.N., kand. geol.-miner. nauk, dots., red.; GAVRUSEVICH, B.A., kand. geol.-miner. nauk, dots., red.; GLADKIY, V.N., inzh., red.; IVANTISHIN, M.N., doktor geol.-miner. nauk, red.; LOGVINENKO, N.V., doktor geol.-miner. nauk, prof., red.; PLATONOV, A.N., inzh., red.; KHATUNTSEVA, A.Ya., kand. geol.-miner. nauk, red.; ZAVIRYUKHINA, V.N., red.

[Chemical composition and internal structure of minerals] Khimicheskii sostav i vnutrennee stroenie mineralov. Kiev, Naukova dumka, 1964. 216 p. (MIRA 18:1)

1. Vsesoyuznoye mineralogicheskoye obshchestvo. Ukrainskoye otdeleniye.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, T.N.

Accessory and trace elements in the minerals of gabbro-norite-labradorite rocks in the Ukraine. Min.sbor. 18 no.2:235-239 '64. (MIRA 18:5)

1. Gosudarstvennyy universitet imeni Shevchenko, Kiyev.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, V., nauchnyy sotrudnik

High effectiveness of cultivated perennial pastures. Nauka i perod.op. v sel'khoz. 9 no.3:20 Mr '59. (MIRA 12:5)

1. Brestskaya sel'skokhozyaystvennaya opytnaya stantsiya.
(Pastures and meadows)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, V.A.; BEDNAYA, L.D.; BOCHKAREVA, I.I.; VITES, V.G.; GEGECHKORI, N.M.; DYATLOVA, O.A.; YEFIMOVA, Z.A.

Spectrum analysis of high-melting metals: tungsten and molybdenum. Fiz.sbor. no.4:44-51 '58. (MIRA 12:5)
(Tungsten--Spectra) (Molybdenum--Spectra)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, V.N.

X-ray therapy of frostbite. Vest.rent. i rad. 33 no.5:90-91 S-O '58 (MIRA 11:11)

1. Iz kafedry khirurgii sanitarnogo fakul'teta (zav. - prof. K.N. Cherepnin), Tomskogo meditsinskogo instituta.
(FROSTBITE, ther.
x-ray ther. (Rus))
(RADIOTHERAPY, in various dis.
frostbite (Rus))

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, V.N.

Comparative evaluation of certain methods for treating frostbite. [with summary in English] Khirurgiia 34 no.4:62-68 Ap '58 (MIRA 11:7)

.. Tomskiy meditsinskiy institut.
(FROSTBITE, therapy
comparison of methods (Rus))

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

C.A

AGAFONOVA, V.S.

Spontaneous color changes during oxidizing dyeing of furs. V. A. Pelelin and V. S. Agafonova. *Legkaya Prom.* 10, No. 7, 21–4(1950).—Furs may be dyed in black colors by the use of mixts. of Ursol T (*m*-tolylenediamine) and Ursol D (*p*-phenylenediamine) in the presence of an oxidant such as H_2O_2 or $Na_2Cr_2O_7$. The initial reaction involves formation of aminomethylindamine and subsequent reaction converts the indamine to a phenazine structure. The mechanism and the kinetics of the reaction are discussed.

Marshall Sittig

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, Ye. (g. Gor'kiy)

Efficient and purposeful work. NTO no.1:8 Ja '59. (MIRA 12:2)

1. Zamestitel' predsedatelya Gor'kovskogo oblastnogo pravleniya nauchno-tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti.

(Gorkiy--Machinery industry)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAF'ANOVA, Ye.I.

Treatment of chronic forms of pneumonia in infants with injections of Aloe extract. Vopr. pediat. 20 no.1:8-12 Jan-Feb 1952. (CLML 22:1)

1. Of Gor'kiy Scientific-Research Pediatric Institute (Director -- A. A. Prokof'yeva; Scientific Supervisor -- Prof. F. D. Agafonov).

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, YE. N.

USSR/Electricity - Semiconductors G-3

Abs Jour : Ref Zhur - Fizika, No 1, 1958, 1371

Author : Agafonova, Ye.N.
Inst : -
Title : Concerning the Problem of the Multi-Electron Model of Semiconductors.

Orig Pub : Fiz. metallov i metallovedeniye, 1956, 2, No 3, 391-396

Abstract : The author discusses briefly the problem of the application of the multi-electron model of an atomic semiconductor with closed spin shells to the investigation of the physical phenomena that take place in these semiconductors. The indicated model, being in greater correspondence with the real structure of an atomic semiconductor, is a step forward not only compared with the band theory, but also compared with the previously existing multi-electron schemes. Within the framework of this model, an investigation was made of the thermal

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

USSR/Electricity - Semiconductors G-3

Abs Jour : Ref Zhur - Fizika, No 1, 1958, 1371

electric properties of atomic semiconductors, and expressions were obtained for the thermal electric coefficient. Here the differential thermal emf, the Thomson coefficient, and the Peltier coefficient turned out to be dependent on many quantities that characterize the interaction of the electrons. The temperature dependence of the coefficient is the same as in the band theory.

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AUTHORS: Agafonova, Ye. N. and Kontorovich, N. P. 126-5-3-4/31

TITLE: Criteria for the Semimetallic State on the Multi-Electron Theory (Kriteriy polumetallicheskogo sostoyaniya veshchestva po mnogoelektronnoy teorii)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1957, Vol V, Nr 3, pp. 402-5 (USSR)

ABSTRACT: The mean electron energy in an atomic impurity semiconductor is derived from the multi-electron theory, assuming closed shells. It is shown that the formation of a constant concentration of carriers, independent of temperature, and equal to the impurity concentration is favoured by energy consideration. Typical semimetallic substances are PbS, PbSe, SiC, etc., as these have conductivities which at first fall as the temperature rises, but at higher temperatures begin to increase. The initial wave equation (1) is of standard form, the dashed quantities relating to impurity atoms. Bogolyubov's second quantization method is then applied to derive the energy operator (Eq.2). The subsequent operations are straightforward, and give the same result as is obtainable by extending the quasiclassical treatment of Shubin (Ref.6) to polar states. The formulae are

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

126-5-3-4/31

Criteria for the Semimetallic State on the Multi-electron Theory applied to some results of Lark-Horovitz (Ref.7).
There are 7 references, 6 of which are Soviet, 1 German.

ASSOCIATION: Ural State University imeni A. M. Gor'kiy
(Ural'skiy Gosudarstvennyy Universitet imeni A.M. Gor'kiy)

SUBMITTED: December 20, 1956

1. Semiconductors--Conductivity 2. Semiconductors--Temperature factors
3. Electrons--Energy 4. Mathematics

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

24.7900

65710

SOV/139-59-2-9/30

AUTHORS: Agafonova, Ye.N. and Kashlev, Yu.A.

TITLE: On the Theory of Magnetic Susceptibility of Atomic Semiconductors

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1959, Nr 2, pp 53-59 (USSR)

ABSTRACT: Korenblit (Ref 1) has calculated the magnetic susceptibility of a homeopolar semiconductor, using the many electron model of Shubin and Vonsovskiy (Ref 2). However, Dorfman (Ref 3) has pointed out that the application of this model to such homeopolar semiconductors as Ge, α-Sn is not correct since Sn and Ge atoms have an even number of valence electrons. These semiconductors have a closed spin shell and so they are more correctly described by a many-electron model of a crystal with closed spin shells (Ref 4 and 5). This model is also very approximate. The semiconductor is looked upon as an ideal monocrystal. The atoms at the lattice points of the ideal monocrystal have, in addition to closed electron shells, two outer electrons in the s-state ("doublet"). In the excited state lattice

Card 1/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

On the Theory of Magnetic Susceptibility of Atomic Semiconductors

points may appear at which there are three electrons (two in the s-state and one in the p-state, ie "triplets") and points with a single electron in the s-state, ie "units", and also points at which one electron is in the s-state and the other in the p-state ("pairs"). It is assumed that the spin orientation in the pairs is antiparallel. At low temperatures, the probability of an electron transition to an excited state is low and the weakly excited state of a semiconductor is represented as an aggregate of elementary excitations of quasi-particles propagated through the lattice. In accordance with the above model in the semi-classical approximation, the Hamiltonian for the excitations of the crystal is written in the form given by Eq (1). This corresponds to the absence of a magnetic field. Peierls (Ref 6) has treated the case where the magnetic field is present. The energy operator is given by Eq (2) and the total energy of the crystal in the semi-classical approximation and in the presence of a magnetic field is given by Eq (3). The magnetic susceptibility at low temperatures is given by Eq (4). The theoretical value is compared with the

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

On the Theory of Magnetic Susceptibility of Atomic Semiconductors

experimental results obtained by Stevens (Ref 8). The comparison is shown in Fig 1, where 1 is the experimental curve and 2 the theoretical one. Fig 2 shows the magnetic susceptibility of α-Sn as a function of temperature. Curve 1 is experimental (Ref 9) and Curve 2 theoretical. In both cases the agreement between experiment and theory appears to be good. There are 2 figures and 10 references, 7 of which are Soviet, 2 German and 1 English.

ASSOCIATION: Ural'skiy gosuniversitet (Ural State University)

SUBMITTED: June 30, 1958

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

24.7600 (1043, 1144, 1160)

S/139/60/000/005/004/031
E201/E191

AUTHORS: Agafonova, Ye.N., and Korunova, A.F.

TITLE: A Theory of Thermal Conductivity of Elemental Semiconductors 21 21

PERIODICAL: Izvestiya vysshikh uchernykh zavedeniy, Fizika, 1960, No. 5, pp 21-25

TEXT: It is usually assumed that the thermal conductivity of semiconductors is due to transfer of heat by phonons (the lattice conductivity) and by current carriers (the electronic conductivity). Recent experimental work (Ref. 1) suggested an additional thermal conductivity which was not related to the electrical conductivity. The present paper deals with this additional conductivity, using a many-electron model of a crystal with closed spin shells (Ref.2). It was assumed that each of N atoms of a semiconductor has two electrons with antiparallel spin orientations in its lowest energy state. The role of Bose excitons (quasi-particles) was considered and they were found to be responsible for the additional thermal conductivity. Fermi excitons were responsible for the carrier (electron and hole) thermal conductivity, obeying the Wiedemann--Franz law.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

85158

S/139/60/000/005/004/031
E201/E191

A Theory of Thermal Conductivity of Elemental Semiconductors

The paper is entirely theoretical.
There are 3 Soviet references.

ASSOCIATION: Ural'skiy gosuniversitet imeni A.M. Gor'kogo
(Ural'sk State University imeni A.M. Gor'kiy)

SUBMITTED: September 28, 1959

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

40639

S/139/62/000/004/016/018
E039/E420

24.7000

AUTHORS: Agafonova, Ye.N., Lychagin, N.I.

TITLE: On the theory of the thermo-effect in atomic semiconductors

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Fizika, no.4, 1962, 173-175

TEXT: Using the anisotropic model for semiconductors the thermal emf and thermal conductivity are calculated for atomic semiconductors taking into account the effect of trapped phonon carriers. The distribution function for the carrier current and the heat flow in the presence of a field E_x and with a temperature gradient dT/dx is given for the isotropic model. For the anisotropic model the same distribution function is obtained but with the carrier energy ε defined by an ellipsoidal function. The thermal emf is shown to be dependent on the coefficient of anisotropy. From the energy flux it is possible to determine the coefficient of electron thermal conductivity, which has two components. An expression for the thermal conductivity is obtained firstly for the isotropic case.

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, Ye.P.

In the Gorkiy Province organization of the scientific technological society. Mashinostroitel' no.4:46-47 Ap '60. (MIRA 13:6)

1. Zamestitel' predsedatelya Gor'kovskogo oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva Mashproma.
(Gorkiy Province--Technological innovations)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, Z., kand.biolog.nauk; AGAFONOV, N.

Cultivation practices in controlling the European corn borer. Zashch.rast.ot vred.i bol. 10 no.4:24-25 '65. (MIRA 18:6)

1. Zaveduyushchiy otdelom zemledeniya Kurskoy sel'skokhozyaystvennoy opytnoy stantsii (for Agafonov).

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, Z.I., starshiy nauchnyy sotrudnik; UKLONSKIY, A.S., akademik, red.; SHISHKIN, V.A., kand.istor.nauk, red.; TARASOV, V., red.; BAKHTIYAROV, [illegible], tekhn.red.

[Russian scientists and explorers of Central Asia] Russkie uchenye-issledovateli Srednei Azii. Tashkent, Gos.izd-vo UzSSR. Vol.3. [I.V.Mushketov; collection of documents] I.V.Mushketov; sbornik dokumentov. Pod red. A.S.Uklonskogo, V.A.Shishkina. 1960. 232 p. (MIRA 14:3)

1. Uzbek S.S.R. Arkhivnyy otdel. 2. TSentarl'nyy gosudarstvennyy arkhiv UzSSR (for Agafonova). 3. Akademiya nauk Uzbekskoy SSR (for Uklonskiy).
(Mushketov, Ivan Vasil'evich, 1850-1902)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

MUSHKETOV, Ivan Va l'yevich, gornyy inzh.(1850-1902); AGAFONOVA, Z.I., starshiy na hnyy sotr.; UKLONSKIY, A.S., akademik, red.; SHISH-KIN, V.A., kand. istor. nauk, red.; TARASOV, V., red.; BAKHTIYAROV, A., tekhn. red.

[Russian scientists and explorers of Central Asia] Russkie uchenye-issledovateli Srednei Azii. Tashkent, Gos. izd-vo Uzbakskoi SSR. Vol.3. Sbornik dokumentov. Pod red. A.S.Ukonskogo, V.A.Shishkina. 1960. 333 p. (MIRA 14:11)

1. Uzbek S.S.R. Arkhivnyy otdel. 2. TSentral'nyy gosudarstvennyy arkhiv Uzbekskoy SSR (for Agafonova). 3. Akademiya nauk Uzbekskoy SSR (for Uklonskiy).

(Mushketov, Ivan Vasil'yevich, 1850-1902)
(Turkestan--Geology)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, Z.I., starshiy nauchnyy sotrudnik; UKLONSKIY, A.S., akademik, red.; SHISHKIN, V.A., kand.istor.nauk, red.; TARASOV, V., red.; BAKHTIYAROV, A., tekhn.red.

[Ivan Vasie'evich Mushketov; collected materials] I.V.Mushketov; sbornik dokumentov. Tashkent, Gos.izd-vo Uzbekskoi SSR, 1960. 333 p. (Russkie uchenye-issledovateli Srednei Azii, vol.3) (MIRA 15:3)

1. TSentral'nyy gosudarstvennyy arkhiv UzSSR (for Agafonova).
2. AN Uzbekskoy SSR (for Uklonskiy).
(Mushketov, Ivan Vasil'evich, 1850-1902)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

ROMANOVSKIY, Gennadiy Danilovich [deceased]; AGAFONOVA, Zoya Ivanovna, starshiy nauchnyy sotrudnik; UKLONSKIY, A.S., akademik, red.; SHISHKIN, V.A., kand.isotr.nauk, red.; MURAKAYEVA, A., red.; BAKHTIYAROV, A., tekhn.red.

[G.D.Romanovskii; collected documents] G.D.Romanovskii; sbornik dokumentov. Tashkent, Gos. Izd-vo Uzbek. SSR, 1961. 298 p. (Russkie uchenye-issledovateli Srednei Azii, vol.4). (MIRA 15:9)

1. TSentral'nyy gosudarstvennyy arkhiv Uzbekskoy SSR (for Agafonov). 2. AN Uzbekskoy SSR (for Uklonskiy).
(Romanovskii, Gennadii Danilovich, 1830-1906)
(Soviet Central Asia--Geological surveys)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1

AGAFONOVA, Z. P.

Dissertation: "Dietetic Treatment in Blood Circulation Disturbances in Children." Cand Med Sci, Second Moscow State Medical Inst imeni I. V. Stalin, 6 Sep 54. (Vechernyaya Moskva, Moscow, 19 Aug 54)

SO: SUM 393, 28 Feb 1955

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100430002-1"